

(Batch)

1641

10-17-99

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/355,793

DATE: 01/05/2000
TIME: 14:07:36

Input Set: I355793.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Blaser, Martin
2 Thompson, Stuart A.
3 Dworkin, Joel
4 <120> TITLE OF INVENTION: Method of Delivering Antigens for Vaccination
5 with a Live Vector
6 <130> FILE REFERENCE: D5979
7 <140> CURRENT APPLICATION NUMBER: US/09/355,793
8 <141> CURRENT FILING DATE: 1999-09-21
9 <150> EARLIER APPLICATION NUMBER: PCT/US98/01780
10 <151> EARLIER FILING DATE: 1998-01-30
11 <160> NUMBER OF SEQ ID NOS: 20
12 <210> SEQ ID NO 1
13 <211> LENGTH: 20
14 <212> TYPE: DNA
15 <213> ORGANISM: artificial sequence
16 <220> FEATURE:
17 <221> NAME/KEY: primer
18 <223> OTHER INFORMATION: Forward primer for kanamycin-resistance (km) gene
19 cassette
20 <400> SEQUENCE: 1
21 tgtagaaaag aggaaggaaa 20
22 <210> SEQ ID NO 2
23 <211> LENGTH: 20
24 <212> TYPE: DNA
25 <213> ORGANISM: artificial sequence
26 <220> FEATURE:
27 <221> NAME/KEY: primer
28 <223> OTHER INFORMATION: Reverse primer for kanamycin-resistance (km) gene
29 cassette
30 <400> SEQUENCE: 2
31 ctaaaacaat tcatccagta 20
32 <210> SEQ ID NO 3
33 <211> LENGTH: 24
34 <212> TYPE: DNA
35 <213> ORGANISM: artificial sequence
36 <220> FEATURE:
37 <221> NAME/KEY: primer
38 <223> OTHER INFORMATION: Forward primer for chloramphenicol-resistance (cm)
39 gene cassette
40 <400> SEQUENCE: 3
41 agtggataga tttatgatag agtg 24
42 <210> SEQ ID NO 4
43 <211> LENGTH: 22
44 <212> TYPE: DNA

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45 <213> ORGANISM: artificial sequence
46 <220> FEATURE:
47 <221> NAME/KEY: primer
48 <223> OTHER INFORMATION: Reverse primer for chloramphenicol-resistance (cm)
49 gene cassette
50 <400> SEQUENCE: 4
51 tttattttatt cagcaagtct tg 22
52 <210> SEQ ID NO 5
53 <211> LENGTH: 20
54 <212> TYPE: DNA
55 <213> ORGANISM: artificial sequence
56 <220> FEATURE:
57 <221> NAME/KEY: primer
58 <223> OTHER INFORMATION: Forward primer for middle sapA promoter region
59 <400> SEQUENCE: 5
60 catctctaca gcagcaaaag 20
61 <210> SEQ ID NO 6
62 <211> LENGTH: 24
63 <212> TYPE: DNA
64 <213> ORGANISM: artificial sequence
65 <220> FEATURE:
66 <221> NAME/KEY: primer
67 <223> OTHER INFORMATION: Forward primer for sapA promoter region
68 <400> SEQUENCE: 6
69 gcggagataa tggtgtagtt gatg 24
70 <210> SEQ ID NO 7
71 <211> LENGTH: 21
72 <212> TYPE: DNA
73 <213> ORGANISM: artificial sequence
74 <220> FEATURE:
75 <221> NAME/KEY: primer
76 <223> OTHER INFORMATION: Reverse primer for sapA promoter region
77 <400> SEQUENCE: 7
78 aactttaaga tctagcgtac c 21
79 <210> SEQ ID NO 8
80 <211> LENGTH: 21
81 <212> TYPE: DNA
82 <213> ORGANISM: artificial sequence
83 <220> FEATURE:
84 <221> NAME/KEY: primer
85 <223> OTHER INFORMATION: Forward primer for middle sapA1 promoter region
86 <400> SEQUENCE: 8
87 aggtactga tttagacgat a 21
88 <210> SEQ ID NO 9
89 <211> LENGTH: 24
90 <212> TYPE: DNA
91 <213> ORGANISM: artificial sequence
92 <220> FEATURE:
93 <221> NAME/KEY: primer
94 <223> OTHER INFORMATION: Forward primer for 3'sapA1 promoter region
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95  <400> SEQUENCE: 9
96      gctggattta caggagattt aacc                24
97  <210> SEQ ID NO 10
98  <211> LENGTH: 27
99  <212> TYPE: DNA
100 <213> ORGANISM: artificial sequence
101 <220> FEATURE:
102 <221> NAME/KEY: primer
103 <223> OTHER INFORMATION: Reverse primer #1 for 3'sapA1 promoter region
104 <400> SEQUENCE: 10
105      gttactggta tcaataacaa cataagt            27
106 <210> SEQ ID NO 11
107 <211> LENGTH: 21
108 <212> TYPE: DNA
109 <213> ORGANISM: artificial sequence
110 <220> FEATURE:
111 <221> NAME/KEY: primer
112 <223> OTHER INFORMATION: Reverse primer #2 for 3'sapA1 promoter region
113 <400> SEQUENCE: 11
114      ctacgtaatc atactgtac c                    21
115 <210> SEQ ID NO 12
116 <211> LENGTH: 15
117 <212> TYPE: DNA
118 <213> ORGANISM: Campylobacter fetus
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Palindromic sequence of putative recombinase
121      recognition site present in the 5' conserved
122      region of S-layer protein gene cassette
123 <400> SEQUENCE: 12
124      ttaaggaatc cttaa                            15
125 <210> SEQ ID NO 13
126 <211> LENGTH: 8
127 <212> TYPE: PRT
128 <213> ORGANISM: Campylobacter fetus
129 <220> FEATURE:
130 <222> LOCATION: 365..377
131 <223> OTHER INFORMATION: Amino acid sequence motif of ATP/GTP binding site of
132      SapD protein
133 <400> SEQUENCE: 13
134      Gly Pro Ser Ala Ala Gly Lys Ser
135                               5
136 <210> SEQ ID NO 14
137 <211> LENGTH: 12
138 <212> TYPE: PRT
139 <213> ORGANISM: Campylobacter fetus
140 <220> FEATURE:
141 <222> LOCATION: 468..479
142 <223> OTHER INFORMATION: Amino acid sequence motif of peptide that is a
143      signature sequence for ABC transporters found in
144      SapD protein

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145 <400> SEQUENCE: 14
146 Lys Ser Gly Gly Gln Arg Gln Arg Val Ala Leu Ala
147 5 10
148 <210> SEQ ID NO 15
149 <211> LENGTH: 5
150 <212> TYPE: PRT
151 <213> ORGANISM: Campylobacter fetus
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Amino acid sequence of conserved peptide found in
154 SapA, SapA1, and SapB protein C-termini; Xaa = Thr
155 or Gly at position #5
W-->OK 156 <400> SEQUENCE: 15
157 Gly Asp Gly Ser Xaa
158 5
159 <210> SEQ ID NO 16
160 <211> LENGTH: 5
161 <212> TYPE: PRT
162 <213> ORGANISM: Campylobacter fetus
163 <220> FEATURE:
164 <223> OTHER INFORMATION: Amino acid sequence of conserved peptide found in
165 SapA2 protein C-terminus
166 <400> SEQUENCE: 16
167 Ser Lys Gly Ser Thr
168 5
169 <210> SEQ ID NO 17
170 <211> LENGTH: 8
171 <212> TYPE: PRT
172 <213> ORGANISM: Campylobacter fetus
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Amino acid sequence of conserved peptide found in
175 SapA, SapA1, and SapB protein C-termini; Xaa = unknown
176 at position #2; Xaa = Val or Ile at position #7
W-->OK 177 <400> SEQUENCE: 17
178 Gly Xaa Thr Tyr Val Val Xaa Asp
179 5
180 <210> SEQ ID NO 18
181 <211> LENGTH: 8
182 <212> TYPE: PRT
183 <213> ORGANISM: Campylobacter fetus
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Amino acid sequence of conserved peptide found in
186 SapA2 protein C-terminus; Xaa = unknown at position #2
W-->OK 187 <400> SEQUENCE: 18
188 Gly Xaa Thr Tyr Val Val Asp Ala
189 5
190 <210> SEQ ID NO 19
191 <211> LENGTH: 4
192 <212> TYPE: PRT
193 <213> ORGANISM: unknown
194 <220> FEATURE:

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195 <223> OTHER INFORMATION: Amino acid sequence of motif implicated in protease
196 secretion
197 <400> SEQUENCE: 19
198 Asp Val Ile Val
199 1
200 <210> SEQ ID NO 20
201 <211> LENGTH: 5
202 <212> TYPE: PRT
203 <213> ORGANISM: Campylobacter fetus
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Amino acid sequence similar to protease secretion
206 motif found in SapA and SapB protein C-termini
207 <400> SEQUENCE: 20
208 Asp Gly Ser Val Ile
209 5

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VERIFICATION SUMMARY
PATENT APPLICATION US/09/355,793

DATE: 01/05/2000
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Input Set: I355793.RAW

Line ? Error/Warning

Original Text

157 W "N" or "Xaa" used: Feature required

Gly Asp Gly Ser Xaa

178 W "N" or "Xaa" used: Feature required

Gly Xaa Thr Tyr Val Val Xaa Asp

188 W "N" or "Xaa" used: Feature required

Gly Xaa Thr Tyr Val Val Asp Ala